

(b) If the amount determined under paragraph (a)(2) of this section is greater than zero, the deficiency is equal to that amount.

(c) If no event listed in the left column of the table in Appendix A to this subpart occurs—that is, the additional service credit does not cause an increase in an employee annuity or a survivor annuity actually paid—or, if the amount determined under paragraph (a)(2) of this section is less than or equal to zero, the deficiency equals zero.

§ 847.605 Methodology for determining the present value of annuity with service credit.

(a) OPM will determine the present value of the annuity including service credit for NAFI service under paragraph (b) or (c) of this section.

(b) In cases in which the annuity is payable to a retiree, the present value under paragraph (a) of this section equals the monthly annuity rate including credit for the NAFI service as of the date of computation under § 847.603 times the present value factor for the retiree's age on that date.

(c) In cases in which the annuity is payable to a survivor, the present value under paragraph (a) of this section equals the monthly annuity rate including credit for the NAFI service as of the date of computation under § 847.603 times the present value factor for the survivor's age on that date.

§ 847.606 Methodology for determining the present value of annuity without service credit—credit not needed for title.

(a) If credit for the NAFI service is not necessary to provide title to an annuity payable on the date of computation under § 847.603, OPM will determine the present value of the annuity without credit for the NAFI service under paragraph (b) or (c) of this section.

(b) In cases in which the annuity is payable to a retiree, the present value under paragraph (a) of this section equals the monthly annuity rate without credit for the NAFI service as of the date of computation under § 847.603 times the present value factor for the retiree's age on that date.

(c) In cases in which the annuity is payable to a survivor, the present value under paragraph (a) of this section equals the monthly annuity rate including credit for the NAFI service as of the date of computation under § 847.603 times the present value factor for the survivor's age on that date.

§ 847.607 Methodology for determining the present value of annuity without service credit—credit needed for title.

(a) If credit for the NAFI service is necessary to provide title to an annuity payable on the date of computation under § 847.603, OPM will determine the present value of the annuity without credit for the NAFI service under paragraph (b) or (c) of this section.

(b)(1) In cases in which the annuity is payable to a retiree, the present value under paragraph (a) of this section equals the present value of the deferred annuity without credit for the NAFI service as of the deferred annuity date discounted for interest to that date determined under § 847.603.

(2) The present value of the deferred annuity without credit for the NAFI service as of the deferred annuity date equals the retiree's monthly annuity rate without credit for the NAFI service as of the deferred annuity date times the present value factor for the retiree's age on that date.

(3) The present value under paragraph (b)(2) of this section is discounted for interest by dividing that amount by a factor equal to the value of exponential function in which—

(i) The base is one plus the assumed interest rate under § 841.405 of this chapter on the date determined under § 847.603, and

(ii) The exponent is one-twelfth of the number of months between the date determined under § 847.603 and the deferred annuity date.

(c) In cases in which the annuity is payable to a survivor, the present value under paragraph (a) of this section equals zero, that is, no survivor annuity would ever become payable without credit for the NAFI service.